Gulf of Mexico Harmful Algal Bloom Bulletin

26 November 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: November 23, 2007

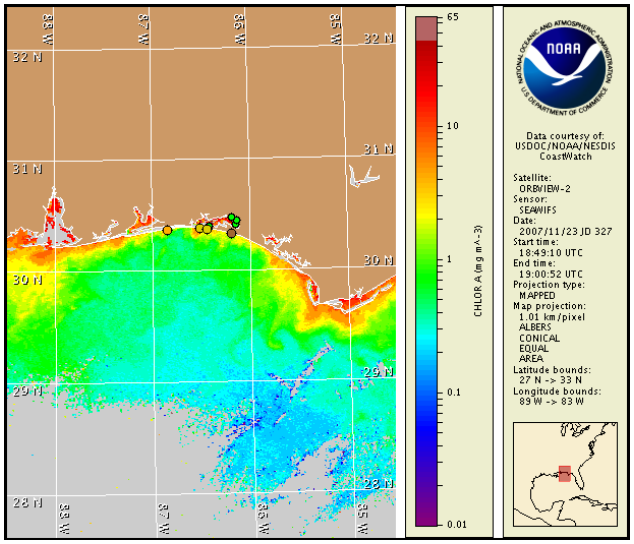
Conditions Report

A harmful algal bloom has been identified in patches from Gulf County, Florida to Mobile County, Alabama and in Harrison County, Mississippi. Patchy high impacts are possible today through Thursday in bay regions of Gulf County, with patchy moderate impacts possible in bay regions of Okaloosa County, Florida and Baldwin County, Alabama. Patchy very low impacts are possible this afternoon through Thursday along the coast from Walton County, Florida to Mobile County, Alabama and in Harrison County, Mississippi.

Analysis

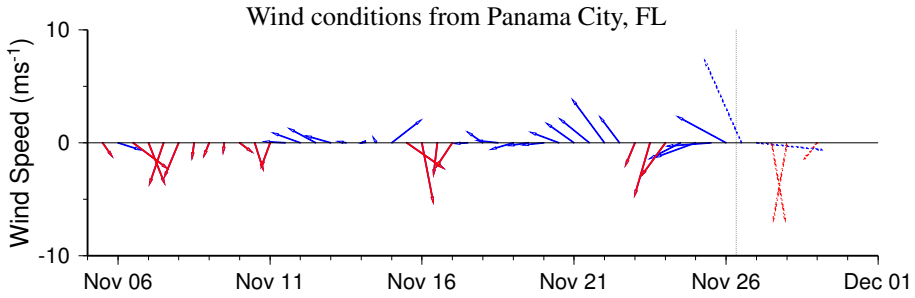
A harmful algal bloom persists in patches from Gulf County, Florida to Mobile County, Alabama and is now present in Harrison County, Mississippi. The Alabama Dept. of Public Health has reported very low levels of *Karenia brevis* in central Harrison County, Mississippi, north and south of Ship Island Pass. A small patch of high chlorophyll (10μg/L) is visible to the north of Ship Island Pass where 'very low b' concentrations of *K. brevis* were identified on 11/25. Chlorophyll levels are routinely elevated throughout this region, limiting present analysis of the bloom's extent. Chlorophyll is continually elevated along the Florida Panhandle to Alabama as well at the following nearshore locations: Bay County- 30°5'22''N 85°43'55''W, Okaloosa County- 30°23'15''N 86°34'14''W, and alongshore from Santa Rosa County to ~10miles south of Mobile Bay. Reports of dead fish have been received from Okaloosa County over the past few days. Winds this week are expected to be offshore throughout the bloom region, minimizing potential impacts. Westward transport is possible through Thursday.

~Fisher, Fenstermacher, Allen



Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from November 19 to 20 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

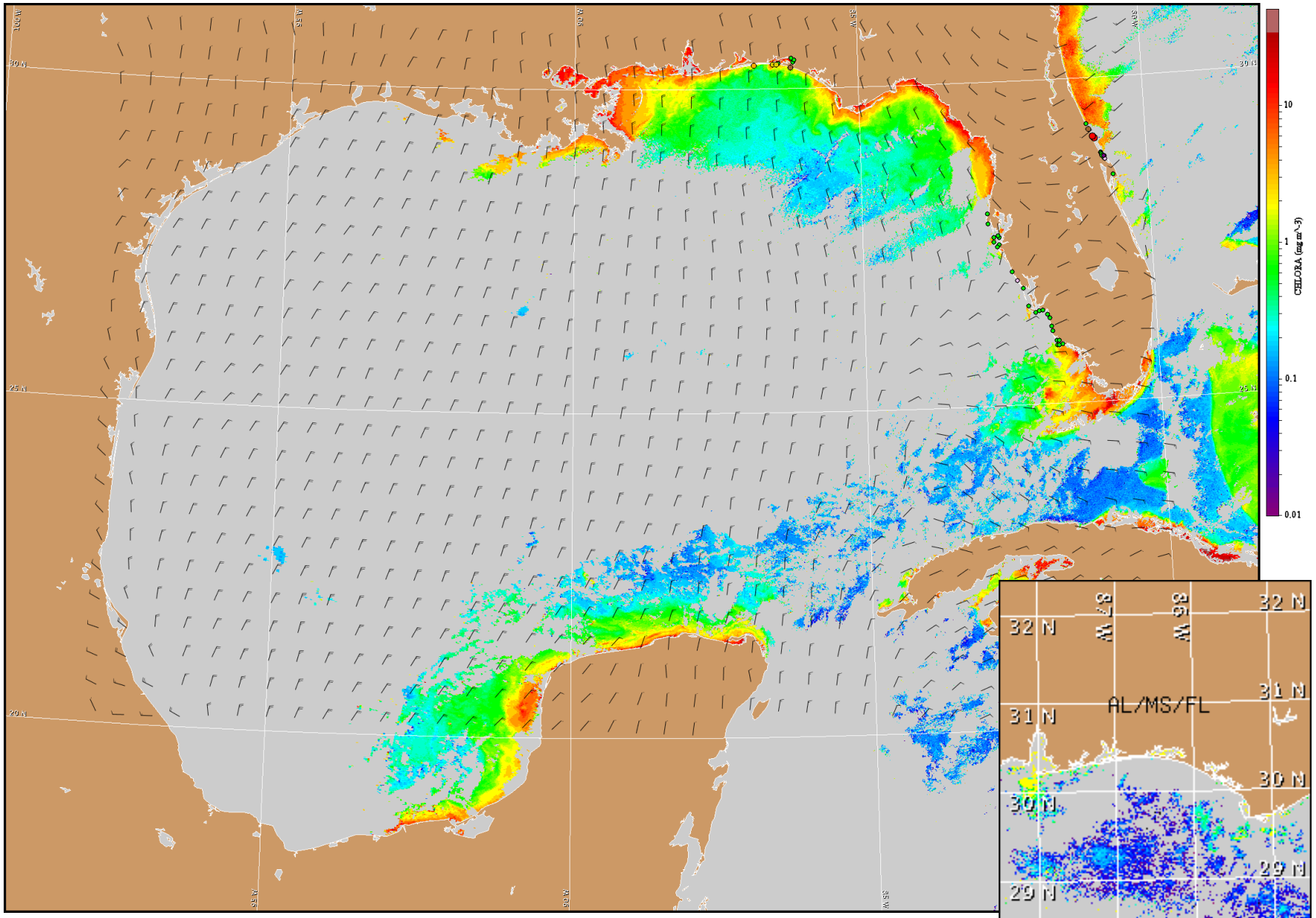
http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



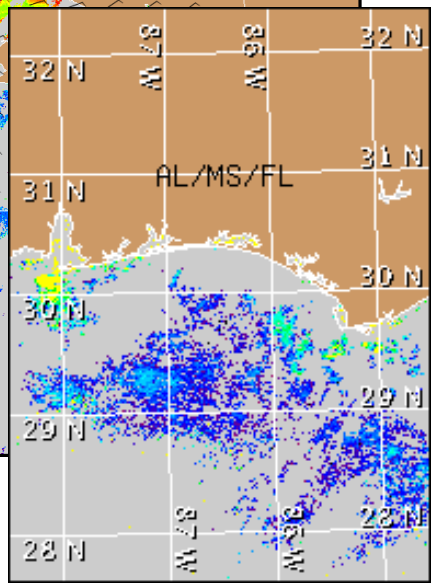
Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

NW Florida and Alabama: Strong westerlies today with north to northwesterlies tonight (15-20kts; 8-10m/s). Strong north to northeasterlies Tuesday (15-20kts; 8-10m/s). Easterlies expected Wednesday becoming north in the evening (10-15kts, 5-8m/s). North to northeasterlies expected Thursday.

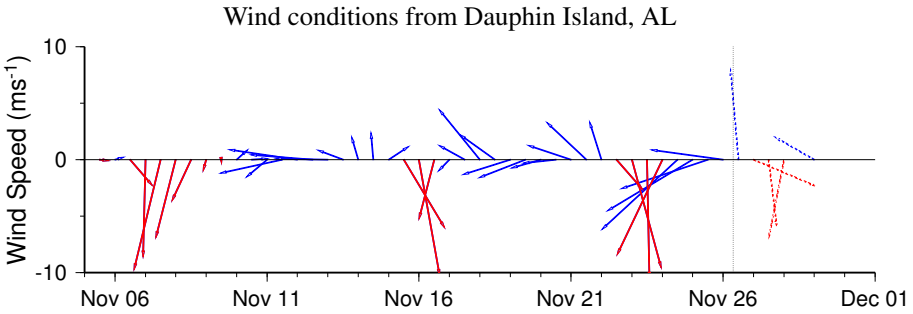
Mississippi: Strong westerlies today with northerlies tonight (15-20kts; 8-10m/s). Strong northeasterlies Tuesday (15-20kts; 8-10m/s). Easterlies expected Wednesday becoming southeast in the afternoon and easterly to northeasterly in the evening (10-15kts, 5-8m/s). Northeasterlies expected Thursday.



Satellite chlorophyll image and forecast winds for November 27, 2007 12Z with Cell concentration sampling data from November 19 to 20 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



Verifi ed and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).


Wind conditions from Dauphin Island, AL
Wind Speed (ms-1)
10
0
-10
Nov 06
Nov 11
Nov 16
Nov 21
Nov 26
Dec 01